ABSTRACT

Locations of path rays in a multi-path channel receiver having multiple time references are detected, e.g., when the receiver switches time references. Locations of received path rays are searched for and determined. The locations are tracked for a

5   predetermined amount of time. If the locations are lost after a predetermined amount of time, a new search for the locations of the received path rays is initiated. The searching may include determining a probable location of a most significant path ray, shifting the location within a predetermined interval, analyzing each shifted location to determine whether the shifted location corresponds to the actual location of the received path ray,

10   and depending on the analysis results, completing the search or determining a probable location of a next most significant ray. The analysis may be performed by correlating each shifted location with a pilot sequence and determining if the correlation results exceed a predetermined threshold. If the correlation results do not exceed the threshold, a determination is made whether all the most significant path rays have been analyzed, and

15   if so, a complete search for the path ray location is initiated. When switching from a time reference of low accuracy to a time reference of high accuracy, the low accuracy time reference may be calibrated to the high accuracy time reference based on averaged measurements of the ratio of clock cycles of the time reference of high accuracy to the clock cycles of the time reference of low accuracy.

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